

# RE-800

## DIGITAL ECHO

### SERVICE NOTES

First Edition

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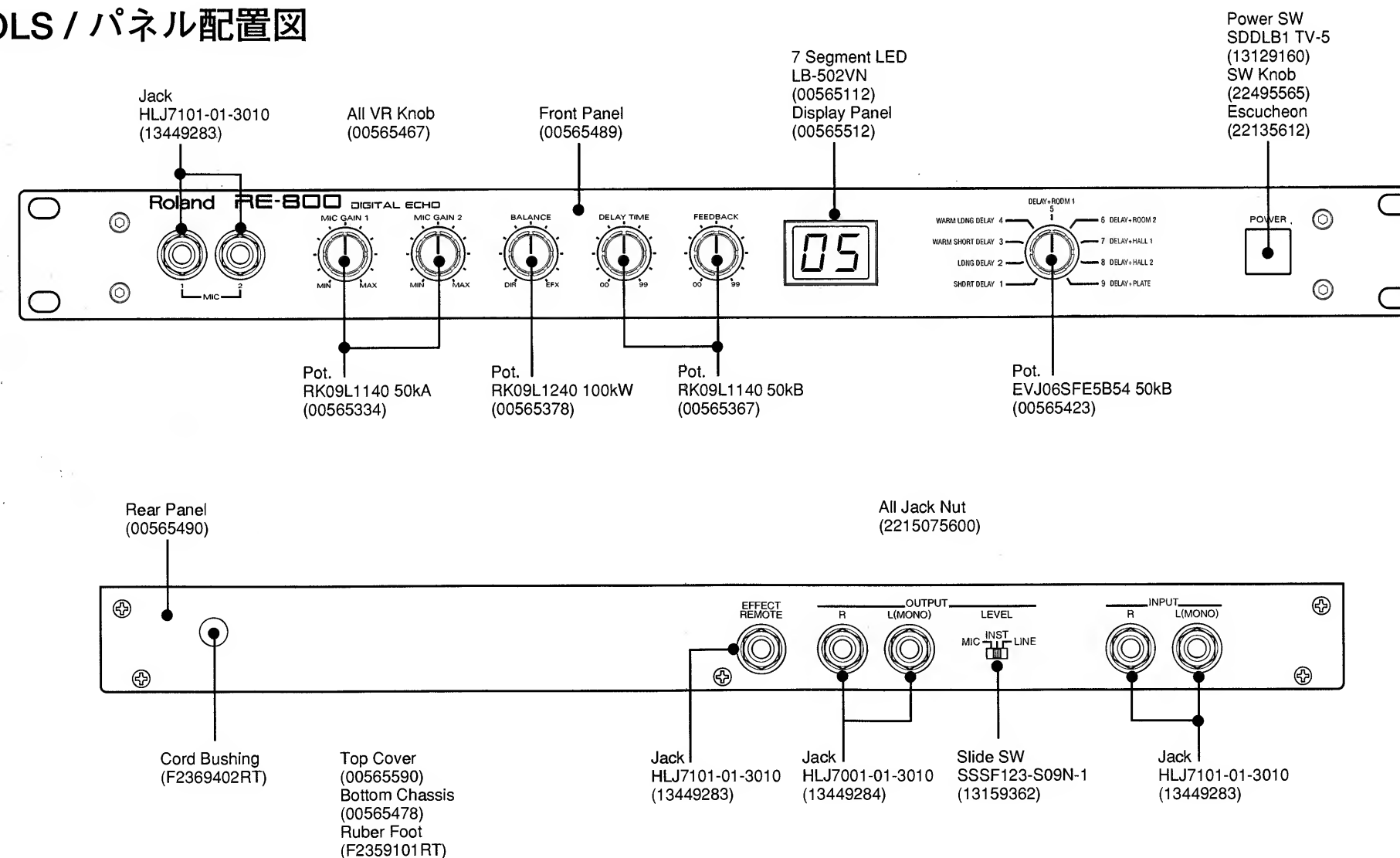
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#### SPECIFICATIONS / 仕様

●Controls	: MIC GAIN 1 Knob, MIC GAIN 2 Knob, BALANCE Knob, DELAY TIME Knob, FEEDBACK Knob, MODE Knob, POWER Switch, LEVEL Switch
●Display	: 7 segments, 2 characters (LED)
●Jacks	: MIC Jacks 1/2, INPUT Jacks L(MONO)/R, OUTPUT Jacks L(MONO)/R, EFFECT REMOTE Jack
●Nominal Input Level	: +4dBm
●Input Impedance	: 10k $\Omega$ (MIC 1/2) 47k $\Omega$ (INPUT L/R)
●Nominal Output Level	: LINE(+4dBm)/INST(-20dBm)/MIC(-40dBm) (selectable with LEVEL Switch) (Load Impedance:100k $\Omega$ )
●Output Impedance	: 5k $\Omega$ (LEVEL Switch:LINE (+4dBm)) 1k $\Omega$ (LEVEL Switch:INST (-20dBm)) 600 $\Omega$ (LEVEL Switch:MIC (-40dBm))
●AD Conversion	: 16 bit Linear 128 times Oversampling $\Delta\Sigma$ modulation Adaptive Focus Method
●DA Conversion	: 16bit Linear
●Dynamic Range	: 114dB or greater (direct:1kHz) 90dB or greater (effect:1kHz)
●Power Supply	: AC 100V, AC 117V, AC 230V, AC 240V
●Power Consumption	: 6.5W (AC 100V, AC 117V, AC 230V, AC 240V)
●Dimensions	: 482(W)×207(D)×44(H)mm 19(W)×8-3/16(D)×1-3/4(H)inches
●Weight	: 2.5kg/5lbs 9oz
●Accessories	: Owner's Manual Japanese (00565167) Owner's Manual English / Mandarin (00565156)

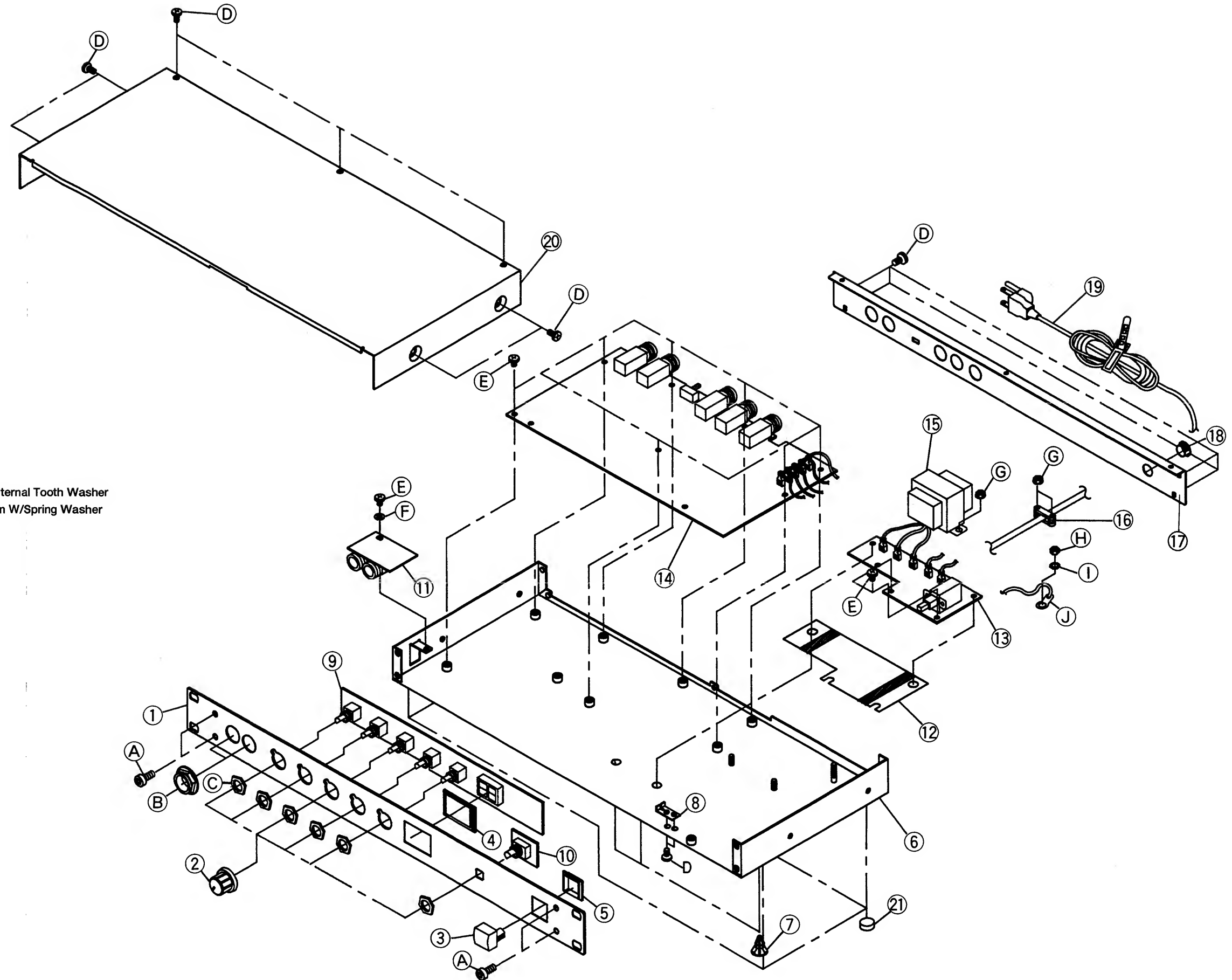
#### LOCATION OF CONTROLS / パネル配置図



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

## EXPLODED VIEW / 分解図

-No.-	-PARTS No.-	-Parts Name and Description-
①	00565489	RE-800 FRONT PANEL
②	00565467	VR KNOB (black)
③	22495565	SW KNOB (black)
④	00565512	RE-800 DISPLAY PANEL
⑤	22135612	ESCUCHEON
⑥	00565478	RE-800 BOTTOM CHASSIS
⑦	F2199102	PCB Joint (black)
⑧	00565501	RE-800 PWB HOLDER
⑨	-----	LED Board ASSY
⑩	-----	VR Board ASSY
⑪	-----	JK Board ASSY
△ ⑫	00565534	RE-800 INSULATING SPACER
⑬	-----	SW Board ASSY
⑭	70356151	MAIN Board ASSY
⑮	G2457101RT	Power Transformer 100/117V
△ ⑯	G2457102RT	Power Transformer 220/240V
⑰	12361410	Line Cord Strain Relief 1702B
⑱	00565490	RE-800 REAR PANEL
△ ⑲	F2369402RT	Cord Bushing
△ ⑲	G3497103RT	Power Cord 100V (black)
△ ⑲	G3497102RT	Power Cord 117V (black)
△ ⑲	G3497101RT	Power Cord 230V (black)
△ ⑲	G3497104RT	Power Cord 240VA (black)
△ ⑲	G3497105RT	Power Cord 240VE (black)
⑳	00565590	RE-800 TOP COVER
㉑	F2359101RT	Rubber Foot
Ⓐ	H5029806RT	4X10 Hex Sokcket Cap Screw FeBc
Ⓑ	2215075600	Jack Nut
Ⓒ	40120923	M9 VR Nut
Ⓓ	40011401	3X8 Bind Head Machine Screw W/Internal Tooth Washer
Ⓔ	40011390	3X6 Bind head Machine Screw FeCm W/Spring Washer
Ⓕ	40011956	M3 Washer FeCm
Ⓖ	40011756	M3 Hex Flange Nut FeCm
Ⓗ	40011767	M4 Hex Flange Nut FeCm
Ⓘ	40011889	M4 External Tooth Washer FeCm
Ⓙ	4503970200	PIN (B-6)



PARTS LIST / パーツリスト

**SAFETY PRECAUTION:**  
The parts marked △ have safety-related characteristics.  
Use only listed parts for replacement.

**安全上の注意：**  
△が付いている部品は、安全上特別な規格でつくられたものです。  
交換の際は、指定された部品番号以外の部品は使わないようにして下さい。

**CONSIDERATIONS ON PARTS ORDERING**  
When ordering any parts listed in the parts list, please specify the following items in the order sheet.

	QTY	PART NUMBER	DESCRIPTION	MODEL NUMBER
Ex.	10	22575241	Sharp key	C-20/50
	15	2247017300	Knob (orange)	DAC-15D

Failure to completely fill the above items with correct number and description will result in delayed or even undelivered replacement.

**パーツ発注に関するお願い**  
オーダーシートには、必ず下記の4項目は正確に記入して下さい。(例外は除く)

	必要数	パーツナンバー	品名	使用機種
例	10	22575241	Sharp key	C-20/50
	15	2247017300	Knob (orange)	DAC-15D

もし記入洩れ、誤記等が有る場合、必要部品が発送できなかったり、大幅な遅れの原因になります。御協力をお願いします。

MN ==> MAIN BOARD ASSY	LD ==> LED BOARD ASSY	SW ==> SW BOARD ASSY
VR ==> VR BOARD ASSY	JK ==> JACK BOARD ASSY	

CASING / ケース				
00565512	RE-800 DISPLAY PANEL			
00565590	RE-800 TOP COVER			
00565478	RE-800 BOTTOM CHASSIS			
00565489	RE-800 FRONT PANEL			
00565490	RE-800 REAR PANEL			
00565501	RE-800 PWB HOLDER			
00565534	RE-800 INSULATING SPACER			
22135612	ESCUCHEON			

KNOB, BUTTON / ツマミ、ツマミ				
00565467	VR KNOB			
22495565	SW KNOB			

SWITCH / スイッチ				
13129160	SDDL1 TV-5	Power Switch		SW
13159362	SSSF123-S09N-1	Slide Switch		MN

JACK, SOCKET / ジャック、ソケット				
13449283	HLJ7101-01-3010	MIC 1/2, INPUT L/R, REMOTE		JK, MN
13449284	HLJ7001-01-3010	OUTPUT L/R		MN

PCB ASSY / 基板完成品				
70356151	MAIN BOARD ASSY	(PCB 00565134)		
NOTE1 : Replacement MAIN BOARD ASSY includes the LED BOARD ASSY, SW BOARD ASSY, VR BOARD ASSY, JACK BOARD ASSY.				
注1 : 補修用MAIN BOARD ASSYは、LED BOARD ASSY, SW BOARD ASSY, VR BOARD ASSY, JACK BOARD ASSYを含みます。				

IC				
00565078	M37470M2-314SP	CPU Mask	IC11	MN
00346723	TC25SC080AU-104	DSP	IC12	MN
00565067	M5M44256BP-7	DRAM	IC14	MN
or 00341378	MSM514256B-70RS			
00347145	LC8390M	A/D Convertor	IC9	MN
00347156	μ PD6379	D/A Convertor	IC10	MN
00565089	M51951A	RESET	IC13	MN
00670801	NJM2100D	OP Amp	IC6	MN
00565812	M5220P	OP Amp	IC1	MN
15189251	M5218AP	OP Amp	IC2, 3, 4, 5, 7	MN
00565123	M66310P	LED Driver	IC19	LD
15199212	TA7805S	Regulator	IC16	MN
15199147	M5F7815L-01	Regulator	IC17	MN
15199148	M5F7915L-01	Regulator	IC18	MN

INDUCTOR, COIL, FILTER / インダクタ、コイル、フィルター				
22445240	BL02RN2-R62	EMI Filter	L1, 2, 3, 4	MN

TRANSISTOR / トランジスター				
15119144	2SA-1048GR		Q5	MN
15119143	2SA-1335GR		Q1, 2	MN
15129179	2SC-2458GR		Q6, 7	MN
15129210	2SC2878-A		Q3, 4	MN

DIODE / ダイオード				
15019126	1SS133			MN
15019209RT	1N4004		D15, 16, 17, 18	MN
15039111RT	PB154M	Bridge Diode	D19	MN
15019428	RD7.5ESB2-T	Zenner Diode	D10	MN
00565112	LB-502VN	7Segment LED	LED1	LD
15029293RT	L-32HDSL	LED (red)	LED2, 3	MN
or 15029198	LN-28RP			

POTENTIOMETER / ボリュ-ム				
00565367	RK09L1140	50kB	VR4, 5	LD
00565334	RK09L1140	50kA	VR1, 2	LD
00565378	RK09L1140	100kW×2	VR3	LD
00565423	EVJ06SFE5B54	50kB with Detent	VR6	VR
00565101	RH0615CJ3J	Trimmer 2.2k	RT1	MN

CRYSTAL, RESONATOR / クリスタル、発振子				
00565090	AT-49 24.576MHz	Xtal	X1	MN
15299159	CST4.00MGW	Cera rock	X2	MN

WIRING, CABLE / ワイヤリング、ケーブル				
00565545	RE-800 WIRING A	3P	CN1	LD, MN
00565556	RE-800 WIRING B	9P	CN2	LD, MN
00565567	RE-800 WIRING C	9P	CN3	LD, MN
00565578	RE-800 WIRING SHIELD		MG1,2	JK, MN

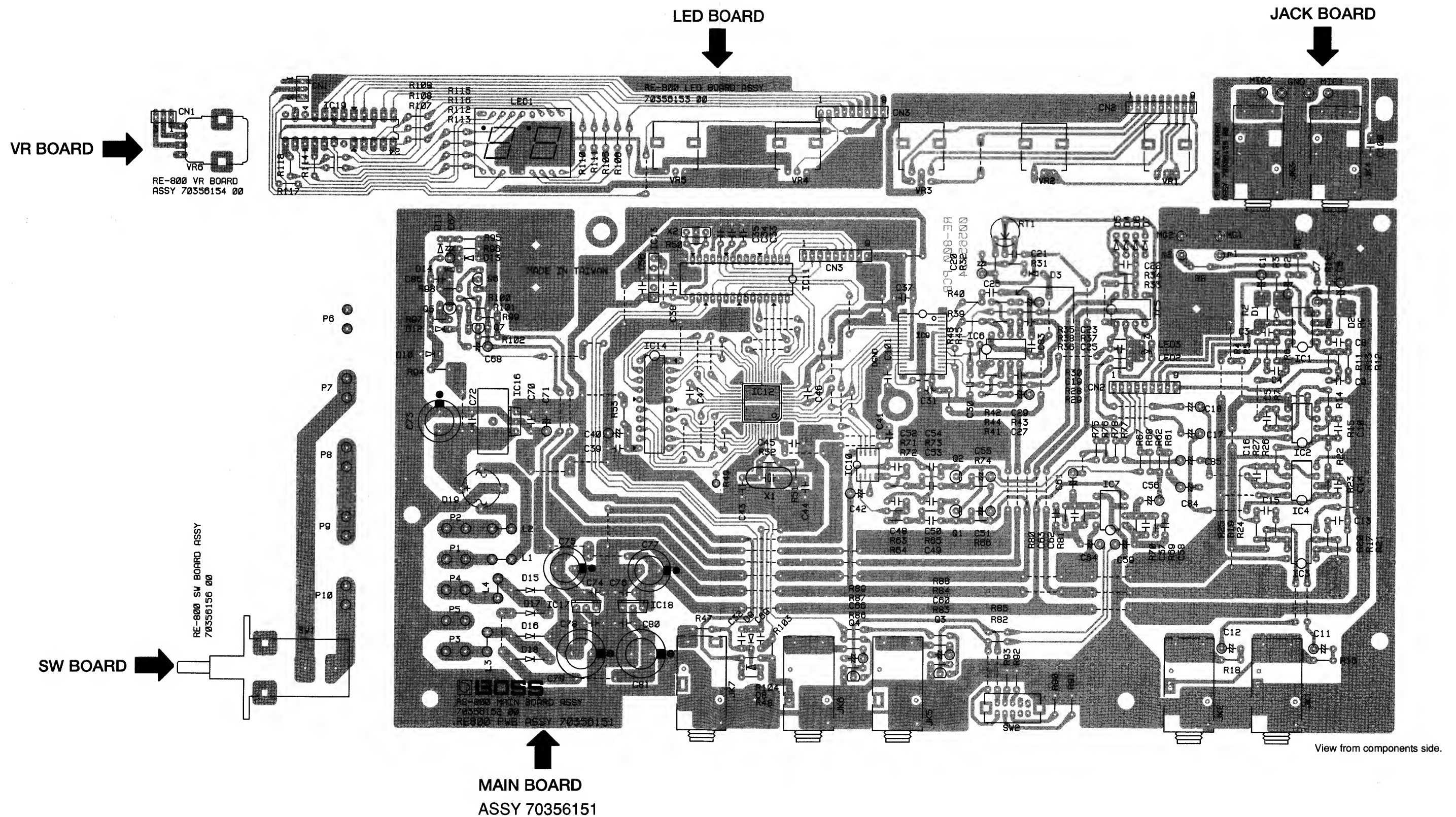
SCREW / ネジ類				
40011390	3×6mm Binding head FeCm Spring Washer			
40011401	3×8mm Binding head FeBc Internal Tooth Washer			
H5019410ZL	3×20mm Binding head FeBc Spring Washer			
H5029806RT	4×10mm Hex Sokcket Cap Screw FeBc			
40011945	M4×0.45 Internal Tooth Washer FeBc			
40011756	M3 Hex Flange Nut FeCm			
2215075600	JACK NUT			
-----	M9 VR Nut			
40011956	M3 Washer FeCm			
40011767	M4 Hex Flange Nut FeCm			
40011889	M4 External Tooth Washer			

MISCELLANEOUS / その他		
F2359101RT	Rubber Foot	Heattsink
4503970200	PIN (B-6)	
H5039701RT	1741BS-2	Quick Slide Terminal
12469158	PC2116-7-PT	Heatsink
00565145	RE-800 Packing Case	
G2647101RT	RE-1000 Pad	

ACCESSORIES / 標準付属品	
00565167	RE-800 MANUAL (Japanese)
00565156	RE-800 MANUAL (English/Mandarin)

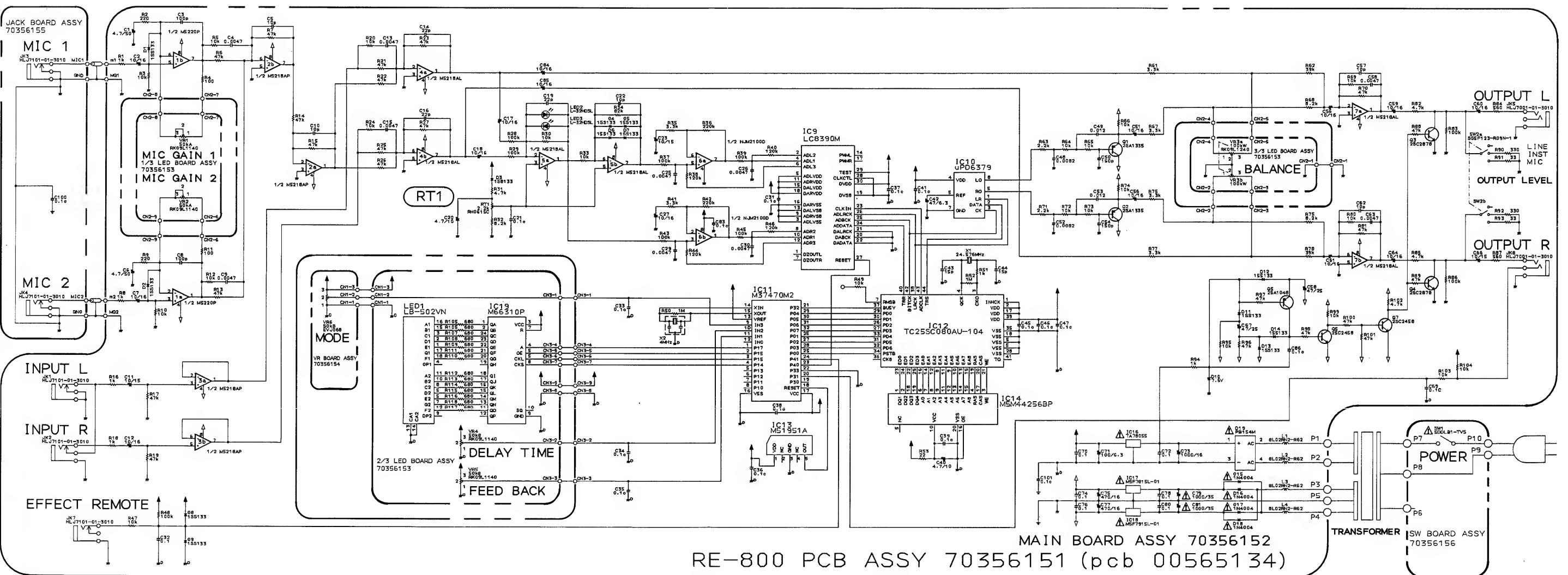
ASSY 70356151  
(PWB 00565134)

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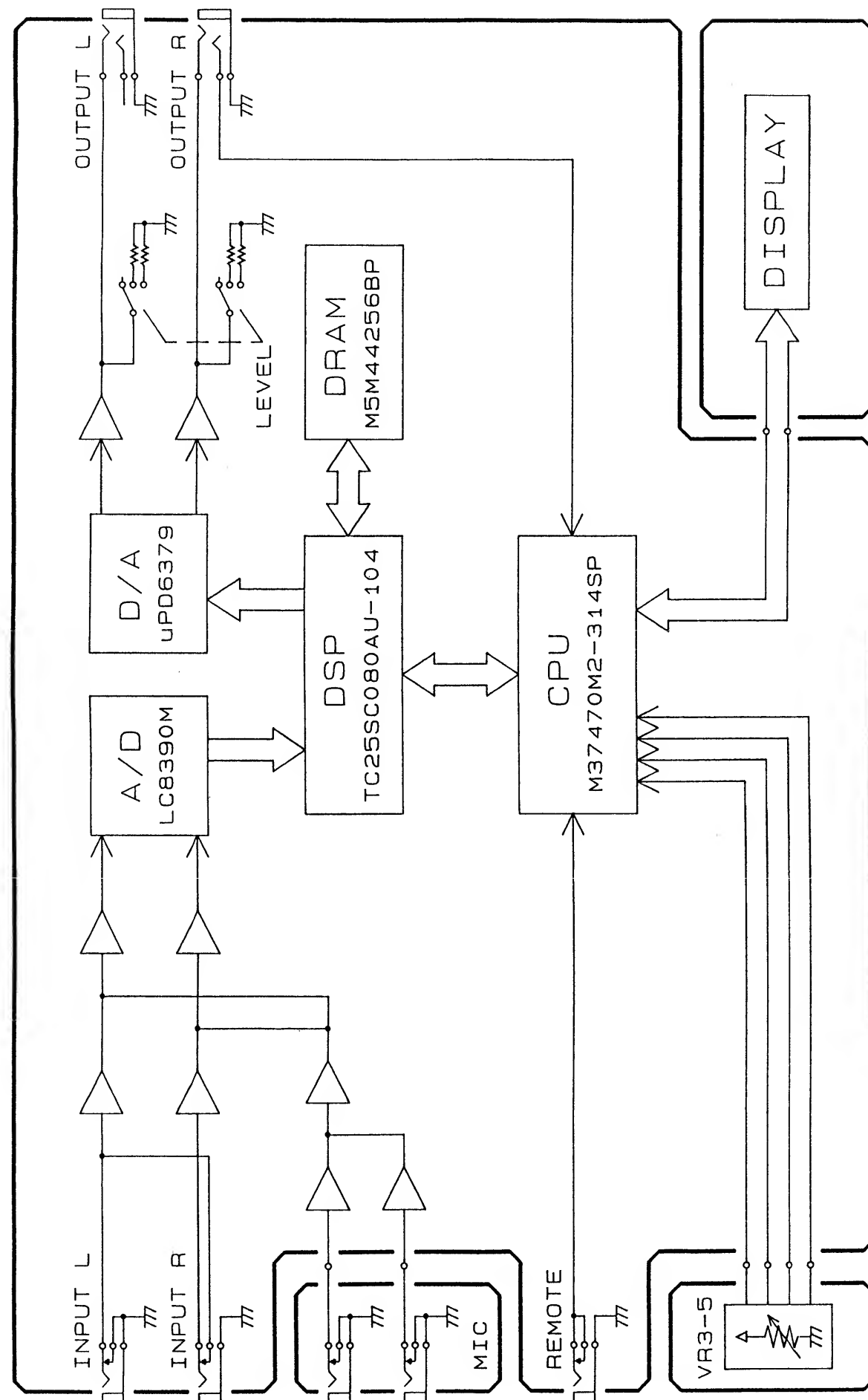




2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40



## BLOCK DIAGRAM / ブロック図



## ADJUSTMENT

## Check OUTPUT Waveform

1. Feed the signal to INPUT L of the RE-800.
2. Connect the scope to OUTPUT L of the RE-800.
3. Set the controls and adjust RT1 on MT Board for the waveform as shown below.

## 調整仕様

## 出力波形のチェック

1. INPUTにオーディオ発振器を接続します。
2. OUTPUT Lにオシロスコープを接続します。
3. セッティングして下図のような波形になるようにRT1を調節します。

